Natural disasters are common phenomena’s that people are faced with all around the world. What most don’t realize is that those who are affected by tragedies not only face the displacement from homes or loss of the personal valuables, but the fear of becoming ill with disease. Both recent and past cases of disasters demonstrate the horrendous effects of the calamity on the surrounding population. The outbreak or spread of disease amongst populations has most often been caused due to these appalling occurrences. Recorded accounts including hurricanes, typhoons, earthquakes, tsunamis, and other events brought about by Mother Nature will be thoroughly examined to discover the results of physical destruction to the land and its effects on those who occupy it.   
 Many precautions can be taken for high risk areas to prevent themselves from the spread of disease, but when disaster strikes, outbreaks seem to spread rapidly due to the distraught circumstances. Medical assistance is relied upon to help victims quickly and effectively in order to halt the extended sickness. With all things considered, all types of natural disasters have their own effects whether it be stagnant water, or infected crops, but in the end disease can be easily spread as a result.

Our current president, Barak Obama has made speeches about world disasters and the efforts to help those who are suffering from the growing spread of disease in consequence of the catastrophe. He states, "And today, I'm also announcing an immediate investment of $100 million to support our relief efforts. This will mean more of the life-saving equipment, food, water and medicine that will be needed. This investment will grow over the coming year as we embark on the long-term recovery from this unimaginable tragedy."

Typhoon; it is a type of cyclone or hurricane consisting of whirlwinds occurring especially in the Pacific Ocean regions. In September 2009, Typhoon Ketsana struck the Philippines, specifically in Manila, damaging $57 million worth of property, and creating chaos amongst the residents, leaving many in utter despair. Those who were affected by the high floodwaters and debris were faced with the possibility of contracting a number of contagious diseases. The illnesses include those from the simplest forms to ones of higher risk. In the Philippines, many were brought down by diarrhea, skin diseases, coughs and colds. The floodwaters brought about not only diseases themselves, but an insect that can easily broaden the vicinity of which the disease may strike. The stagnant water attracted mosquitoes that could potentially carry diseases such as malaria and dengue fever, which aroused many concerns throughout the area.

The outbreak of such diseases required much medical attention and relief efforts. The disaster was too much for just the United Nations to handle, therefore they appealed to other countries for assistance. Due to the massive destruction of agriculture and crops worth $128 million, the islands were left with little or no production of food supplies. Being the most important aspect, aid organizations helped to provide food, water, and medicine to those who were struck by various illnesses, although the uncollected debris and polluted water prohibited them from fully recovering.

Earthquakes are a frequent occurrence throughout the world today. Whether it strikes with a powerful 9.7 magnitude or a slight 2.6 magnitude, the area interrupted with this type of ruinous disaster is affected significantly through its destruction and devastation. After an earthquake takes place, inhabitants are faced with the brutality of injuries including open wounds, broken or fractured bones, and possibly life threatening circumstances. But the trauma exists beyond the disaster’s annihilation. On January 12, 2010, an earthquake struck in the poor country of Haiti.

Interruptions in their basic services such as the water supply quickly increased the risk of waterborne disease outbreaks. A New York Times article regarding the earthquake in Haiti discusses the circumstances survivors of the earthquake experienced; no shelter and no food or water. Although drinking water systems are typically destroyed in a time of disaster, the article states that “survivors will succumb to thirst and dehydration much faster than malnutrition.” As a result, victims will instinctively drink any water they come across to prevent dehydration even though the water is likely to be contaminated and will initiate disease.

Haiti is already faced with the deadly diseases of Aids, malaria, and tuberculosis. Adding additional unwanted diseases creates a greater need for antibiotics and drugs, which are initially limited during a disaster. In order to prevent these post-disaster diseases, especially waterborne illnesses, emergency organizations race to ship in clean water and makeshift toilets before diseases spread.

After the chaos of the earthquake in Haiti came to a halt, survivors considered themselves lucky to have overcome such a disastrous event. What they didn’t realize was that a new disaster lay ahead of them. The amount of disease found in decaying bodies, contaminated water, and lack of bandages caused these victims a struggle to survive.

A violent tropical cyclone with severe winds is classified as a hurricane. Hurricanes like many natural disasters can potentially, cause an outbreak of disease. Hurricane Katrina hit New Orleans on August 29, 2005. The aftermath was unimaginable; including flooding and massive destruction. Over 1000 people were reported dead during the cleanup of Hurricane Katrina.   
 Drinking water is a critical need for surviving after a natural disaster, but can also be the main resource impacted during a hurricane. The stop or lack of electricity can result in backup of water systems causing serious flooding. In the aftermath of natural disasters such as Hurricane Katrina, flooding caused overloaded sewage systems. This poor sanitation sparked the forming of bacteria in fresh drinking water. Cholera, E. coliand noroviruses are a few diseases triggered by unsanitary water. “It does not take many microbes or sick people to spread disease, particularly when they are living together in a shelter,” says Kellogg Schwab (PhD, co-director of the [Center for Water and Health](http://www.jhsph.edu/_archive/2009.05.05_EHS/Centers/WaterandHealth/index.html)).   
 Along with many other problems New Orleans faced, there was a rapid growth in the mosquito population after Hurricane Katrina hit. The insects began to breed on the stagnant water. As many know, mosquitoes are carriers of the West Nile Virus and dengue fever. With fertile breeding water around, the risk of contracting the virus significantly increases. Under stagnant water, flooding water can become contaminated with harmful toxins. Carbon dioxide contamination is common when portable generators are used around the disaster area. In this case, it is difficult to clean up without portable generators. The flood areas after a hurricane put the rescue workers and residents at risk for exposure to harmful toxins.   
 Hurricane Katrina, along with other hurricanes, has triggered the spread of many diseases through unsanitary drinking water, backed up sewage systems, and stagnant flood water. People should avoid standing in flood water after a hurricane to lower the chance in contracting a disease, and spreading it to the surrounding area.

The number of dust storms that occur vary throughout the years, but have begun to emerge more recently in the 1990’s and our current decade, especially amongst the dry terrain of Africa, Australia, Pakistan, and China. In September of 2009, huge dust storms plagued Sydney, Australia, causing millions of minute particles of dangerous bacteria to be spread across the entire globe. These storms intoxicated the air with a red haze of about 5,000 tons of dust, forcing people to inhale and choke on the dusty pollution.

This dust storm in particular was a consequence of the drought which Australia had been facing for ten ongoing years. With research, a serious drought has been found to be only one of many causes. Laurence Barrie, chief researcher of World Meteorological Organization said, “Dust storms are a natural phenomenon, but are influenced by human activities.” Most people don’t realize that they are causing this disaster, which not only affects a portion of a country, but the world as a whole. The minute particles of Sydney’s dust storms act like pollution or acid rain, because they can penetrate into the skin of any human.

The seriousness of disease that can be proliferated across the globe fluctuates as you move farther from the source. In the Sahara, dust storms spread lethal meningitis mostly infecting young children. Evidence has been discovered that these tiny dust fragments mobilize meningitis in the bloodstream. In the United States, a common disease linked to intense dust storms is “valley fever.” 250 out of the 200,000 people infected with this illness will result in death.

Researchers have proven that dust storms lead to “disastrous air quality.” Dust blown across the oceans can create a transmission of disease to other countries. One example can be found in the rise of asthma cases found in people of the Caribbean Islands. These rates appeared to increase during the harsh drought period in Africa.

After a dust storm occurs, and the hazy overcast of dust disappears, the storm continues to take its course throughout the world. Although most parts of the world may not be aware of their susceptibility to being polluted with dust, these silent, but deadly storms will slowly leave their mark on people in every corner of the globe, causing influenza, meningitis, and respiratory diseases.

“If climate change leads to a reduction in rainfall, then the two trends reinforce themselves,” said Lester Brown, director of the Earth Policy Institute. Scientists are convinced that less rainfall will lead to a more arid climate, which will lead to dust storms. The ultimate conclusion of this statement is thought that dust storms will lead to more outbreak of disease all around the world. To prevent this, researchers suggest putting a halt on deforestation and enforcing restrictions on goat herders, which eat almost all vegetation in parts of the world. Dust storms are a natural disaster. They will take their course as they please, and humans will eventually have to adjust to the occurrences of Mother Nature.

Natural disasters not only have an enormous devastating effect on our world, but the diseases which they cause have been discovered to take more lives than the disaster itself. One disease most commonly contracted shortly after any form of disaster appears to be diarrhea, which is caused by bacteria that contaminates water killing about 2.2 million people worldwide each year. Dengue fever, one of the most frequent diseases found in victims, infects around 20 million people annually. Symptoms of this sickness include fever and bone and muscle pain that is triggered by mosquito-borne viruses regularly found in stagnant water following a disaster. Likewise, anyone who intakes food or water infected with bacteria could transmit cholera or typhoid. Together, these diseases infect over 25 million people a year, and without treatment may suffer death.

Disease: a medical condition that results in pathological symptoms and is not the direct result of injury. The outbreak or spread of disease amongst populations across the globe has most often been caused due to these horrendous natural disasters. The number of infections has skyrocketed and needs to be precluded. Natural disasters cannot be put to a halt, but disease can be prevailed. To do so, it requires three important matters: an informed population, precautions to prepare the community, and motivated volunteers to return life to disaster victims. According to the Center for Disease Control and Prevention, there are a number of things those suffering from a natural disaster can do for themselves to avoid transmitting a disease. “Practice good hygiene, seek medical help if injured or stressed, drink plenty of safe fluids, and protect yourself from insects.”

As previously stated, natural disasters are commonly sudden, unexpected occurrences. They have the capabilities of traumatizing entire countries, who in consequence rely on their surrounding neighbors and fellow nations to assist them in recovering. Therefore to provide aid, these countries send medical professionals, monetary values, and supplies. It also has the ability to alter nearby countries’ transportation systems and necessitate reconstruction in order to continue daily activities. At times, diseases can influence agriculture and other products manufactured in the area, which in turn affects the imports that places around the world may receive. As proved, countries throughout the world can be affected through the spread of disease, such as the expansion of bacteria particles of a dust storm or a contagious deadly fever from contaminated water.

In the instance of a natural disaster caused by the unpredictable Mother Nature, be aware that disease is a probable possibility. Millions of people are unfortunately infected each year across the globe in account of this phenomenon. Mother Nature will ultimately take its course, but preventing the resulting course of disease is essential to not only save lives, but better our world’s environment and quality of life.